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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,502	09/22/2003	Ryuji Zaiki	239198US2	6840
22850	7590	02/22/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER YUN, JURIE	
			ART UNIT 2882	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/22/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/22/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/665,502	Applicant(s) ZAIKI, RYUJI	
	Examiner Jurie Yun	Art Unit 2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-10 and 12-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 13 is/are allowed.
- 6) ☒ Claim(s) 1,2,8-10,14 and 15 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,7 and 16-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/5/07 has been entered.
2. The amendment filed 8/1/06 has been entered.

Claim Objections

3. Claim 1 is objected to because of the following informalities: in the last line, there is lack of antecedence for "the attachment units". Appropriate correction is required.
4. Claim 10 is objected to because of the following informalities: there appears to be a typo because the claim does not read well ("related to the movement at several times."). Appropriate correction is required.
5. Claim 16 is objected to because of the following informalities: there is lack of antecedence for "the signal" in line 10. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 8-10, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heitman et al. (USPN 4,298,801) in view of Fenner (USPN 5,561,699).

8. With respect to claim 1, Heitman et al. disclose an X-ray diagnosis apparatus, comprising: an X-ray tube (Fig. 1, 27) that irradiates X-rays to an object and an X-ray detector (28) that detects X-rays penetrated through the object; a supporting unit (12) configured to support the X-ray tube and the X-ray detector; a bed (11) configured to have the object placed thereon; an operation unit (16) configured to define movement of at least one of the supporting unit and the bed; an electrical communication unit configured to transmit a signal related to the movement from the operation unit to the bed (column 5, lines 53-58); a drive control unit configured to control the movement of at least one of the supporting unit and the bed based on the transmitted signal (column 5, lines 19-28), wherein the drive control unit stops the movement of at least one of the supporting unit and the bed when the operation unit is not attached to any of the attachment units (none of the elements would be moveable without the control box, 16, in place).

Heitman et al. disclose all of the elements except for a wireless communication unit configured to transmit a wireless signal related to the movement from the operation unit to the bed, and an attachment unit configured to attach and detach the operation unit to the bed. Heitman et al. use electrical communication (column 5, lines 53-58). Fenner teaches a wireless communication unit configured to transmit a wireless signal related to the movement from the operation unit to the bed, and an attachment unit

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configured to attach and detach the operation unit to the bed (column 3, lines 10-17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply this teaching and have the control box of Heitman et al. be wireless, for obvious advantages such as being able to place the control box anywhere along the bed and to obviate the need for electrical wires.

9. With respect to claim 2, Heitman et al. as modified by Fenner disclose the bed includes a plurality of attachment units configured to attach and detach the operation unit (Fenner - Fig. 1, 3 & 10).

10. With respect to claims 8 and 9, Heitman et al. as modified by Fenner disclose the attachment unit includes a guide rail, wherein the communication unit is provided with respect to the guide rail (Heitman et al. – column 5, line 35).

11. With respect to claim 10, Heitman et al. as modified by Fenner do not disclose the communication unit transmits the wireless signal related to the movement several times. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit a wireless signal related to movement several times, since such redundancy ensures that the signal is processed. Wireless signals can, at times, be intercepted by intervening objects and can be transmitted over such distances or in such conditions that the signal is too weak to be detected properly. Wireless devices commonly "hand-shake" to ensure that signals were received in their entirety, and received properly. By communicating the wireless signal several times, the system of Heitman et al. as modified by Fenner could benefit where interference or signal

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weakening has occurred and can redundantly ensure hand-shaking has taken place.

The proper transmission of the signal can thereby occur.

12. With respect to claim 14, Heitman et al. disclose the drive control unit controls the movement of at least one of the supporting unit and the bed in a horizontal direction (column 4, lines 34-41).

13. With respect to claim 15, Heitman et al. disclose the drive control unit controls the movement of at least one of the supporting unit and the bed in a rotation direction (column 4, lines 34-41).

Allowable Subject Matter

14. Claims 3, 4, 6, and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art fails to disclose an X-ray diagnosis apparatus comprising an X-ray tube, an X-ray detector, a supporting unit, a bed, an operation unit, a wireless communication unit, a drive control unit, an attachment unit, and a state detection unit configured to detect a state of attachment of the operation unit to the bed, as claimed in claim 3. Claims 4, 6, and 7 are allowable by their dependency.

15. Claims 12, 13, and 16-21 are allowed. Note that claim 16 would need to be amended to overcome the objection cited above.

The following is an examiner's statement of reasons for allowance: Prior art fails to disclose an X-ray diagnosis apparatus comprising an X-ray tube, an X-ray detector, a

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supporting unit, a bed, an operation unit, a wireless communication unit, a drive control unit, an attachment unit, a second operation unit and a second communication unit, wherein the drive control unit controls the movement of at least one of the supporting unit and the bed based on the second signal transmitted by the cable prior to transmission of the wireless signal, as claimed in claim 12.

Prior art fails to disclose an X-ray diagnosis apparatus comprising an X-ray tube, an X-ray detector, a supporting unit, a bed, an operation unit, a wireless communication unit, a drive control unit, an attachment unit, a second operation unit and a second communication unit, wherein the drive control unit stops the movement of at least one of the supporting unit and the bed when the second signal transmitted by the cable is different from the transmitted wireless signal, as claimed in claim 13.

Prior art fails to disclose an X-ray diagnosis apparatus comprising an X-ray tube, an X-ray detector, a supporting unit, a bed, an operation unit, a plurality of attachment units, a drive control unit, and a state detection unit configured to detect a state of attachment of the operation unit to the bed, as claimed in claim 16. Claims 17-21 are allowed due to their dependency.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jurie Yun whose telephone number is 571 272-2497.

The examiner can normally be reached on Monday-Friday 8:30-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jurie Yun
Examiner
Art Unit 2882

February 9, 2007